



# IS ENTITY THEORY OF INTELLIGENCE ALWAYS MALADAPTIVE? : CONTEXTUALIZING IMPLICIT THEORIES OF INTELLIGENCE

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## ABSTRACT

Previous studies on implicit theories of intelligence have largely been done to prove the hypothesis that incremental theories are adaptive whereas entity theories are maladaptive. Moreover, these studies have viewed psychological disengagement (adopted by entity theorists) negatively by calling it a self-handicapping strategy. They have only tried to answer, "how" endorsing a particular theory results in adaption or maladaptation. It is worth noting that since these theories have emerged in the dominant American culture, the researchers have assumed the significance of a particular domain as given. They have completely ignored the dimension of power and resistance in their definition of adaptation.

This paper attempts to answer the "why" aspect of endorsing a particular implicit theory. No theory in the past has focused on why some people endorse entity and others incremental. It is argued here that the methodological framework of research on the adaptive/maladaptive value of any implicit theory of intelligence should allow the researcher to question/challenge the taken for granted assumptions inherent in mainstream educational discourse such as desirability of goal, the best strategy to achieve such goals. Therefore, the resistance perspective seems an appropriate methodological framework as it looks at psychological disengagement as a form of resistance. Taking adaptation in a broader sense and including such aspects as compliance and resistance in it, gives a chance to look at the adaptive value of those who endorse entity view. This paper provides some useful insights for the future research in the domain of implicit theories of intelligence.

**KEYWORDS:** implicit theories, adaptation, self-handicapping strategies, psychological disengagement.

## INTRODUCTION:

The concept of intelligence informs the practice and policy of education, directly or indirectly. Establishment of pedagogical sciences based on measurement of intelligence was the common goal of educators and psychologists in 20<sup>th</sup> century. The earlier debate in the field focused on what intelligence is and what it is comprised of. Many theories of intelligence were formulated in his regard. However, these theorists were not interested in answering such highly interesting questions as "How do you make people more intelligent?" "What causes a child's intelligence to increase or decrease?" and "How can we reach durable results?" (Tomic and Kingma, 1998). Perhaps, in response to this confusion about what intelligence is, a new trend of research started focusing on how people view this construct i.e. the belief people hold about intelligence.

Starting a new debate in the field of intelligence, Dweck and Leggett (1988), in their seminal paper "*A social-cognitive approach to motivation and personality*" argued that there are two views people hold about their intelligence: *Entity view* which focuses on intelligence as a fixed entity and *incremental view* which focuses on intelligence as malleable which can be improved by effort.

Dweck and Leggett (1988) argued that the willingness to sustain engagement with difficult tasks is considered adaptive whereas a response pattern that prevents them from functioning effectively in the face of difficulty must ultimately limit their attainments and therefore considered as maladaptive. However, they have defined the term adaptation in one sense and have assumed this definition as a universal truth. These researches have largely ignored the different meanings of adaptation which have different connotations for different individuals and cultures. The present research argues that the usefulness of a particular kind of view of human attributes will depend upon the meaning of adaptation one employs. Mere compliance to dominant norms is not the only form of adaptation. Even resisting the dominant norms can be adaptation for some. By mildly resisting the historically constructed significance of the domain by those in power, either through disengagement from the dominant domain or by engagement in a meaningful domain, entity theorists tend to adapt. In this sense, there is a possibility to look at the adaptive value of holding an entity theory.

## IMPLICIT THEORIES: AN OVERVIEW:

Alfred North Whitehead (1938) distinguishes between static and dynamic world view at both epistemological as well as ontological level. At ontological level, it implies whether the reality is static or dynamic and at an epistemological level, it implies whether reality is best known by quantifying its unchangeable dispositions or its dynamic processes (Dweck, Chiu and Hong, 1995). Drawing partially on this view, Dweck and Bempechat (1983) suggested that school children's implicit theories of intelligence can be divided into Entity and Incremental view. The former is the belief that intelligence is a fixed entity, affected only modestly by effort. In contrast, the latter is the belief that intelligence is changeable because it is a set of knowledge and skills that improve with practice and efforts. These students make low-ability, helpless attributions quickly when faced with

failure (Henderson & Dweck, 1990; Hong, Chiu, Dweck, Lin & Wan, 1999 cited in De Castella and Byrne, 2015). In this way they become vulnerable to negative feedback and criticism and are prone to disengagement when such threats emerge (Hong *et al.*, 1999; Mangels *et al.*, 2006). In contrast, the belief that intelligence is malleable (an incremental theory) typically orients students towards 'growing' their abilities. These students move towards challenges and are more likely to attribute setbacks to their own efforts or strategies (Hong *et al.*, 1999). Because they believe intelligence can be cultivated, incremental theorists become less defensive about their shortcomings and show greater engagement, persistence and resilience in the face of setbacks with a focus on learning from their mistakes (Mangels *et al.*, 2006; Hong *et al.*, 1999). A great deal of theoretical and empirical support exists for the impact of implicit theories on students' academic motivation and performance in school (Blackwell, Trzesniewski and Dweck, 2007; Dweck, 1999).

However, it is interesting to note that the previous studies on implicit theories of intelligence have largely been done to prove the hypothesis that incremental theories are adaptive whereas entity theories are maladaptive. For instance, many researchers have argued that entity theorists tend to adopt avoidant and self-handicapping strategies in achievement contexts to conceal potential incompetence even before discrepancies arise (Shih, 2009 cited in Burnette, O'Boyle, Vanepps, Pollack, J.M. and Finkel, 2012; Burnette, 2012). Compared to individuals who believe that intelligence is fixed, those who believe that intelligence can be changed show more sustained motivation in the face of difficulty (Blackwell, Trzesniewski, & Dweck, 2007 cited in Burnette, O'Boyle Vanepps, Pollack, and Finkel, 2012) and focus more on self-improvement rather than self-defense (Niiya, Crocker, & Bartmess, 2004 cited in Burnette, O'Boyle, Vanepps, Pollack, and Finkel, 2012; Nussbaum & Dweck, 2008). Moreover, these studies have viewed psychological disengagement (adopted by entity theorists) negatively by calling it a self-handicapping strategy leading to maladaptation. In this paper, we argue that psychological disengagement can be "a self-protective strategy" instead as "a self-handicapping strategy" employed by the people holding an entity view.

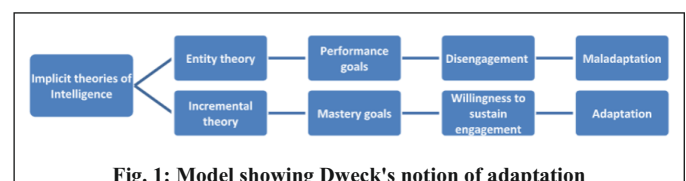


Fig. 1: Model showing Dweck's notion of adaptation

## ACRITIQUE OF DWECK'S SOCIAL-COGNITIVE THEORY OF MOTIVATION:

Although a vast literature on implicit theories has supported Dweck *et al.*'s arguments, yet some of the researches have questioned the validity of the implicit theories people hold about their intelligence. For instance, a preliminary study by

Breen, Cleary and O'Shea (2007) failed to endorse Dweck's theory and found that it is an individual's level of confidence but not his theory of intelligence which plays an important role in how he approaches, perseveres with and performs a task at hand. Sandra Graham (1995) in her response to target article in a special edition of *Psychological Inquiry* (1995) on implicit theories points out that implicit theories proposed by Dweck are linked to the stability dimension of attribution research. This stability dimension designates causes like aptitude and intelligence as construct or varying with time. Graham argued that Dweck's work closely parallels the attributional conception of ability (aptitude) as stable or relatively unchanging (Weiner, 1986 cited in Graham, 1995). In contrast Dweck argued that incremental theory of intelligence is cultivable through efforts. In response to this Graham pointed to Weiner's statement (1986) that "often ability is perceived as unstable, particularly when it connotes skill or knowledge rather than aptitude, for an increase in skill or knowledge may be foreseen" (Weiner, 1986 cited in Graham, 1995).

Peterson in his response from helplessness researches to the target article "Implicit theories and their role in judgements and reactions: A world from two perspectives" in *Psychological inquiry* (1995) goes to the extent saying that helplessness as always seen as undesirable is an oversimplification. In his words "There are circumstances in which giving up and letting go pay dividends" (also see Rothbaum, Weisz, & Snyder, 1982). He also talks about the cognitive efficiency of entity theorists which is sometimes productive and respectful (Peterson, 1995). Despite such attacks, research on implicit theory is time and again validating the negative aspect of entity and positive aspects of incremental view ignoring the positive aspects of entity theorists. In their response to the comments made by various authors, Dweck et al tried to respond to the positive aspect of endorsing entity view but finally boiled down to their original position viewing entity theory in a negative light.

### A MYOPIC ANALYSIS OF AN INDIVIDUAL:

The perspective of implicit theories of intelligence emphasizes an individual's belief about intelligence. However, it should be noted that an individual exists in relation to the society. The definition of adaptation given above overlooks social aspects such as social inequality in the society and the domination of one group over the other. In this regard, Kincheloe and Steinberg (1999) in their book "Rethinking Intelligence" argued that the mainstream educational psychology views human beings as unitary and self-contained individual. This is a myopic analysis. Rather an individual's personal world is an intersubjective cultural form. Even the implicit theories of intelligence fall in this gamut where they have reduced an individual to an asocial being. Pepi Leistyna (1999) points out that the gap between an individual who is looked at in isolation with society and the individual who is considered as being comprised of socio-political nature of identity is "personality vacuum". Dweck and Leggett have created a sort of personality vacuum in their notion of implicit theories of intelligence by taking an asocial perspective of individual. However, adaptation is a matter of social consensus and is defined in a social context. And based on one meaning, such a definition of adaptation limits the possibility of looking at other individuals from a different perspective. In this sense, it becomes important to find out the other meanings of adaptation which exist in the literature in psychology as well as other disciplines.

### ADAPTATION: A BROADER MEANING:

From the above review, it would be important to note that almost all the studies are based on one particular understanding of adaptation. To quote, Dweck and Leggett, 1988,

"The enjoyment of challenge and willingness to sustain engagement with difficult tasks appears to be an adaptive stance toward valued goals. A response pattern that deters individuals from confronting obstacles or that prevents them from functioning effectively in the face of difficulty must ultimately limit their attainments and therefore considered as maladaptive". (Dweck and Leggett, 1988:257).

The above quote implies that there is an inherent assumption in implicit theory approach that a given domain is equally valued by everyone in society. The society is assumed to be heterogeneous with people having similar belief systems. Those people who try to maintain engagement with this given domain are considered adaptive and those who resist its acceptance and disengage considering other domains as relevant are considered maladaptive. Harackiewicz and Elliot (1995) raised a very relevant question in response to the target article in a special issue of *Psychological Inquiry* (1995) that whether Dweck et al themselves are looking at the world as stable entity and are assuming the significance of a given domain as stable which means that they themselves are "suffering" from entity world view. It has been argued that life is a roller coaster when we view the world through entity glasses (Harackiewicz and Elliot, 1995).

The assumption that there is one valued goal in society and classifying an individual's belief about his or her ability to reach that goal into dichotomous framework (entity or incremental) is not realistic. This assumption has reduced an individual to an asocial, ahistorical and apolitical being. It is asocial in the sense that it has neglected the social structure existing in the society; ahistorical because it fails to take into account the historically constructed significance of the domain and apolitical in the sense that it neglects the aspect of power and resistance. A question which becomes important is: Can an individual be studied in isolation of

social, historical and political context?

### POWER AND RESISTANCE: ADAPTATION FOR ENTITY THEORISTS:

Since power structure is inherent in any given society, people have different ways of adapting to their respective contexts. This paper attempts to contextualize students' implicit beliefs by defining the concept of adaptation in a broader way. As can be seen in Fig. 2, given the social structure of society, those at advantageous positions and those at disadvantageous positions will have different meanings of adaptations. In this sense, people endorsing entity view are and should not be taken as a homogeneous group. All of them do not share equal power. Entity view holders at advantageous position will feel adaptation by creating the significance of a particular construct and domain by complying with those norms and those at disadvantageous position can feel a sense of adaptation by resisting to the norms created by dominant group through psychological disengagement and asserting their own subjectivity. Reicher and Haslam (2010) argue that people who are positively valued by virtue of their group membership (e.g. members of dominant groups) would identify with and act in terms of the group.

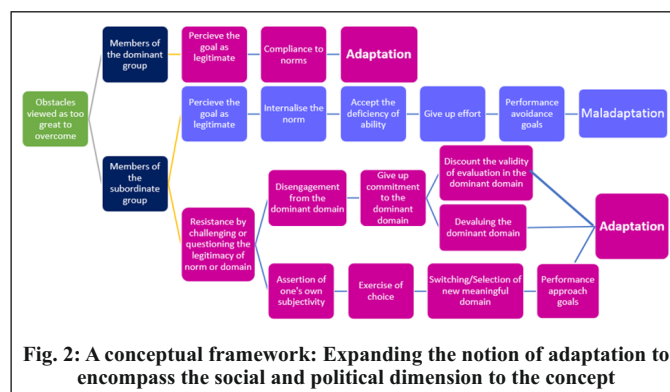


Fig. 2: A conceptual framework: Expanding the notion of adaptation to encompass the social and political dimension to the concept

#### a. Compliance: adaptation for members of dominant groups:

The modernist notion that knowledge and research are universal and objective is the most acceptable notion in the present educational system (Kincheloe and Steinberg, 1999). The construct like intelligence has always been viewed from the perspective of those in power. Intelligence has become highly valued in societies who have defined it as a valued product. There is a balance of force in and over education whereby a particular orientation, whilst not universally accepted, is taken for granted and against which there is no viable alternative (Avis, 2002). The acceptance of and dependence on intelligence testing in schools legitimated basic American values and served to aid the school in its mission to reproduce social configurations, maintain social stability, and assure continuity in spite of fundamental demographic, political, and economic transformations (Richardson and Johannmeier, 2011). Even within the scientific community, there are prominent scholars who argue that some social groups are destined to achieve greater intelligence than others (e.g., Herrnstein & Murray, 1994; Jensen, 1998; Rushton & Jensen, 2005). In terms of implicit theories, Americans are likely to believe in the fixed nature of intelligence and that school success is determined by natural ability (Steinberg, 1996 cited in Denton, 2008). The educational system reaffirms an entity view of intellectual abilities through ability tracking and intelligence testing (Weinstein, 2005 cited in Denton, 2008).

In this regard, power creates adaptation as it leads to compliance of the dominant norms and values created by them which are perceived as legitimate. Reicher and Haslam (2010) argue that people who are positively valued by virtue of their group membership (e.g. members of dominant groups) would identify with and act in terms of the group. Believing their status quo as stable and legitimate allows members of dominant group to hold an entity view and maintain it. People at dominant position will almost always like to perceive their position as stable rather than unstable. In this regard, the concept of "stereotype" affirms the power hierarchy within the society. Prior researches have demonstrated that stereotypes can boost the performance of group members favored by such stereotypes (Walton & Cohen, 2003 cited in Denton, 2008). In the condition of stereotype lift, it has been found that people like to hold an entity view where their performance is considered better as compared to negatively stereotyped group. It has been argued that an entity view of ability should specifically boost the performance of favorably stereotyped group members by assuring them that their group's advantage, relative to other groups, is immutable (Denton et al, 2008). Even Grant and Dweck (2003) showed that an entity view of intelligence was related to enhanced achievement in a college level course relative to an incremental view, but only among already high-achieving students. This implies that people with an entity mindset treat conformity to stable norms, role expectations hierarchies and rules within a system as important (Quintanilla, 2012).

These and many other similar researches demonstrate that those who are in the advantageous position and have power will feel a sense of adaptation in

the given domain.

Quintanilla (2012) talks about system justification motive: a motivational tendency to rationalize the status quo. According to him, people view existing social, economic and political institutions as fair, legitimate and desirable. Belief in a just world provides psychological benefits, coping with feelings of uncertainty and fulfilling a range of existential, epistemic and relational needs.

Along with this, even the social situations influence which mindset people would endorse. For instance, under threat and uncertainty, people tend to adopt entity view as they like to have stability in their lives. It has been argued that even those holding incremental view tend to shift to entity view as it protects them during the time of uncertainty (Quintanilla, 2012). Future research must cater to this aspect of entity view leading to adaptation.

#### b. Resistance: adaptation for members of subordinate groups:

Foucault (1978) says, "Where there is power, there is resistance". People of subordinate groups can feel a sense of adaptation by questioning or challenging the legitimacy of the dominant domain by psychologically disengaging from the dominant domain and also by asserting choice of one's own values by engaging in new meaningful goals. This is a form of resistance. It is important to note here that resistance does not occur in either-or binaries. Scott (1990) argues that, to seek out only public defiance and rebellion as indications of resistance is to grossly simplify the concept, and expects rather a lot from subordinates in situations in which power differentials are extreme. There are other milder forms of resistance which have not been taken into account while studying resistance. One such mild form of resistance in academic achievement context is disengaging from the dominant domain by devaluing the domain and by discounting the validity of evaluation in that domain. For the members of subordinate group, people either internalize the norm of the dominant group by perceiving it as legitimate. This internalization makes them accept that they do not have the required ability to fulfill the goal which leads to maladaptation. It should be noted that the disengagement or disidentification process can take various forms, ranging from temporary or situation-specific devaluing of a domain in response to negative outcomes to a more chronic divestment of the self from one or more domains of achievement (Aronson, Fried and Good, 2002). In devaluing the domain, the outcomes received in that context are no longer viewed as relevant or important to how a person defines or evaluates the self (Schmader, Major and Gramzow, 2001). This strategy of psychological disengagement is often adopted for domains in which one's personal outcomes imply incompetence (Schmader, Major and Gramzow, 2001). By devaluing the activity, it becomes less important in the individual's self-definition (Tougas et al., 2005 cited in Caudroit and Stephan, 2010). For example, in the academic context, students may engage in a devaluing process whereby they decrease the importance of academic achievement to the point where they no longer view it as a self-relevant domain (Regner & Loose, 2006 cited in Caudroit and Stephan, 2010). Another strategy of psychological disengagement mentioned above involves discounting the validity of an evaluation one has received (Schmader, Major and Gramzow, 2001). By attributing no validity to feedback or performance appraisals, individuals can protect their self-esteem from discriminatory evaluations (Tougas et al., 2005). For example, in the academic context, students may engage in a discounting process whereby they decrease the importance of grades received by considering them as biased indicators of their ability (Regner & Loose, 2006). Theoretical considerations and empirical research suggest that with unattainable goals and unmanageable demands motivational disengagement and self protective cognitions bring about superior outcomes than continued goal striving (Tomasik et al, 2010). In this sense, disengagement can be regarded as a "self protective strategy" rather than "self handicapping strategy" used by people endorsing entity view as they resist the dominant norms and values. Sound empirical data can help confirm this research finding about the other pathways which have been developed theoretically.

Another set of people may not perceive the goals made by the dominant group as legitimate and therefore show resistance towards complying those goals. They may psychologically disengage by discounting the validity of evaluation in the dominant domain or devalue the dominant goal altogether (Crocker and Major, 1989). An existing body of research provides support for the argument that psychological disengagement allows stigmatized individuals to cope with negative outcomes in stereotype-relevant domains (Forbes, Schmader and Allen, 2008). Willis (1981) and Ogbu (1978) explain resistance and academic disengagement as a reaction or adaptation to an oppressive, stigmatizing socio-cultural system. People should be most inclined to resist domination when they see inequality as both illegitimate and unstable and can thus envisage cognitive alternatives to it (Turner & Brown, 1978 cited in Reicher and Haslam, 2010). In this context, disengagement from the task altogether is one such alternative. And engaging to new meaningful domains and goals is another. Switching to other (not so valued) goals which are more meaningful to them helps them assert their own subjectivity in deciding which goals they personally value.. This informs us that along with compliance to the dominant norm and succeeding in it, the other meaning of adaptation is resistance.

Gandhi also defines adaptation in terms of compliance and resistance keeping in view the given social structure of the society as he says "adaptability is not imitation. It means power of resistance and assimilation." Power and resistance are intimately related to and embedded in the cultural particularities of human relations - not antecedent to them - they are shaped by cultural context and informed by assumptions that are both culturally particularistic and highly divergent (Hoffman, 2010).

#### CONCLUSIVE COMMENTS:

This paper attempts to answer the "why" aspect of endorsing a particular implicit theory. No theory in the past has focused on why some people endorse entity and others incremental. Because psychology's values, assumptions, and norms have supported society's dominant institutions since its birth as a field of study, the field's mainstream contributes to social injustice and thwarts the promotion of human welfare (Albee, 1986; Baritz, 1974). All this adds to the legitimization of the dominant and suppressing the subordinate all together. But the interesting thing to note here is that the one being suppressed is finding his voice by resisting to the dominant norms, however mild it may be. It is argued here that the methodological framework of research on the adaptive/maladaptive value of any implicit theory of intelligence should allow the researcher to question/challenge the taken for granted assumptions inherent in mainstream educational discourse such as desirability of goal or the best strategy to achieve such goals. Therefore, the resistance perspective seems an appropriate methodological framework as it looks at psychological disengagement as a form of resistance. Taking adaptation in a broader sense and including such aspects as compliance and resistance in it, gives us a chance to look at the adaptive value of those who endorse entity view.

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